

Translation

PATENT COOPERATION TREATY

PCT/JP2003/014996



PCT

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference Y1K0965	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/JP2003/014996	International filing date (<i>day/month/year</i>) 25 November 2003 (25.11.2003)	Priority date (<i>day/month/year</i>) 22 November 2002 (22.11.2002)
International Patent Classification (IPC) or national classification and IPC E03D 11/16, F16L 55/00		
Applicant TOTO LTD.		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 4 sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising:
 - a. ☐ (*sent to the applicant and to the International Bureau*) a total of _____ sheets, as follows:
 - ☐ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
 - ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
 - b. ☐ (*sent to the International Bureau only*) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

- ☒ Box No. I Basis of the report
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

Date of submission of the demand 04 June 2004 (04.06.2004)	Date of completion of this report 21 January 2005 (21.01.2005)
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2003/014996

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This report is based on translations from the original language into the following language _____, which is language of a translation furnished for the purpose of:
- ☐ international search (under Rules 12.3 and 23.1(b))
- ☐ publication of the international application (under Rule 12.4)
- ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

- ☒ The international application as originally filed/furnished
- ☐ the description:
pages _____, as originally filed/furnished
pages* _____ received by this Authority on _____
pages* _____ received by this Authority on _____
- ☐ the claims:
pages _____, as originally filed/furnished
pages* _____, as amended (together with any statement) under Article 19
pages* _____ received by this Authority on _____
pages* _____ received by this Authority on _____
- ☐ the drawings:
pages _____, as originally filed/furnished
pages* _____ received by this Authority on _____
pages* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/JP 03/14996

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-36	YES
	Claims		NO
Inventive step (IS)	Claims	1-14, 18, 19, 24, 27-36	YES
	Claims	15-17, 20-23, 25, 26	NO
Industrial applicability (IA)	Claims	1-36	YES
	Claims		NO

2. Citations and explanations

Document 1: JP 2001-220805 A (Toto Ltd.), 17 August 2001, paragraphs [0114] to [0139]; fig. 9 and 10

Document 2: CD-ROM of the specification and drawings annexed to the Japanese Utility Model Application No. 10766/1993 (Laid-open No. 71578/1994) (Toto Ltd.), 7 October 1994, paragraphs [0007] and [0008]; all drawings

Document 3: JP 8-260551 A (Inax Corporation), 8 October 1996, entire text; all drawings

Claims 15, 17, 20 to 23, 25 and 26

The inventions set forth in claims 15, 17, 20 to 23, 25 and 26 do not involve an inventive step in the light of documents 1 and 2 cited in the international search report. It would be easy for a person skilled in the art to conceive of applying the feature set forth in document 2, wherein the internal diameter of the entirety of the passage inside the drain socket body to be made at least as large as the internal diameter of the trap drain passage outlet, to the drain socket having a guide groove formed on the narrow part of the passage. The number, depth and width of guide grooves set forth in document 1 are matters which could be selected as necessary by a person skilled in the art.

Claim 16

The invention set forth in claim 16 does not involve an inventive step in the light of documents 1 to 3 cited in the international search report. It would be easy for a person skilled in the art to apply the feature set forth in document 3, wherein a wider part of the passage is provided on the upstream side of a narrow part of the passage, to the drain socket set forth in document 1.

Claims 1 to 14, 18, 19, 24, and 27 to 36

The invention set forth in claims 1 to 14, 18, 19, 24, and 27 to 36 involves an inventive step in relation to the documents cited in the international search report. These documents do not disclose a feature of having a straightening plate provided in such a manner so as to extend from the inner wall surface towards the inside of the passage upstream of the siphon inducing portion of the drain socket body, or a feature of forming a siphon inducing shelf which extends in at least the opposite direction of the eccentric direction on the downstream end of the wider part of the passage.